

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** MYUNG-KEUN YEO, NAM-SU LEE, YOUNG-TAIK LIM and DAE-SUL SIM

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Appeal No. 1998-0871  
Application No. 08/406,301

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ON BRIEF

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Before FLEMING, DIXON, and LEVY, **Administrative Patent Judges.**

LEVY, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-12, which are all of the claims pending in this application. This appeal is properly before the Board of Patent Appeals and Interferences as appellants' claims have been finally rejected. *See* 35 U.S.C. § 134 and 37 CFR § 1.191(a)

The appellants' invention relates to a VCR integrated with a projector. Specifically, a switching part (50) selects a signal from either a VCR (30) or a TV tuner (20) in response to a signal

from a key application part (10). Projector part (40) processes and projects the signal selected (specification, page 6).

Independent claim 1, is reproduced as follows:

1. A VCR-projector assembly comprising:

a key application part including various keys for providing a VCR function control signal, a projection function control signal, and a projector zoom function control signal;

a tuner for tuning broadcast signals received through an antenna;

VCR means for directly recording the broadcast signals from the tuner and reproducing the recorded broadcast signals or other recorded signals;

projector means for directly processing and projecting the broadcast signals from the tuner, or the reproduced recorded broadcast signals or other reproduced recorded signals from the VCR means;

switching means connected to the tuner, the VCR means, and the projector means for selecting a projection function, without a jack between the projector means and either of the VCR means or the tuner; and

zoom processing means for responding to the projector zoom function control signal from the key application part.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Miyashita	5,136,397	Aug. 04, 1992
Dunlap et al. (Dunlap)	5,216,552	Jun. 01, 1993
Murayama et al. <sup>1</sup> (Murayama)	5,282,234	Jan. 25, 1994

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<sup>1</sup> We note that the examiner (answer, page 3) incorrectly lists the patent number of Murayama et al as 5,282,243.

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Lim et al. (Lim)

5,483,285

Jun. 09, 1996  
(Filed Apr. 16, 1993)

Claims 1-8, 11 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lim in view of Dunlap and Miyashita. Claims 9 and 10 stand rejected under 35 U.S.C. § 103 over Lim in view of Dunlap, Miyashita and Murayama .

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 16, mailed July 23, 1997) and letter of communication (Paper No. 18, mailed November 13, 1997 stating that the reply brief has been entered and considered but no further response by the examiner is deemed necessary) for the examiner's reasoning in support of the rejections, and to the appellants' brief (Paper No. 15, filed May 7, 1997) and reply brief (Paper No. 17, filed September 23, 1997) for the appellants' arguments thereagainst.

### **OPINION**

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we will sustain the rejection of claims 1-6 under 35 U.S.C. § 103, but we will reverse the rejection of claims 7-12 for the reason set forth, *infra*.

At the outset, we note that appellants state (brief, page 5) that “As argued, claims 1-12 stand or fall together as one group.” We further note that in the brief and reply brief, appellants argue language found in each of independent claims 1, 6 and 7,<sup>2</sup> and also provide additional arguments with respect to claim 7. With respect to claims 9 and 10,<sup>3</sup> we further note that appellants do not specifically argue reasons for separate patentability, and refer to claims 9 and 10 only to the extent of stating (brief, page 8) that the Murayama reference does describe how to avoid right-to-left type image inversions by using circuitry, but that the reference does not overcome “the basic failings of the examiner’s combination of Dunlap, Lim, and Miyashita, as described above for independent claim 7.”

37 CFR § 1.192 (c) (7) (July 1, 1996) *as amended at* 60 Fed. Reg. 14518 (March 17, 1995), which was controlling at the time of appellants’ filing the brief, states:

For each ground of rejection which appellant contests and which applies to a group of two or more claims, the Board shall select a single claim from the group and shall decide the appeal as to the ground of rejection on the basis of that claim alone unless a statement is included that the claims of the group do not stand or fall together and, in the argument under paragraph (c) (8) of this section, appellant explains why the claims of the group are believed to be separately patentable. Merely pointing out differences in what the claims cover is not argument as to why the claims are separately patentable.

Accordingly, we will consider appellants’ claims 1-6 as standing or falling together and we will treat claim 1 as a representative claim of that group. In addition, we will consider claims 7-12 as standing or

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<sup>2</sup> Claims 1, 6 and 7 come under the same ground of rejection, i.e., under 35 U.S.C. § 103 as unpatentable over Lim in view of Dunlap and Miyashita.

<sup>3</sup> Claims 9 and 10 come under a different ground of rejection, i.e., under 35 U.S.C. § 103 over Lim in view of Dunlap, Miyashita and Murayama.

falling together and we will treat claim 7 as a representative claim of that group. Turning first to the rejection of claims 1-6 under 35 U.S.C. § 103, appellants assert (brief, page 5) that Lim does not disclose a tuner, and that the prior art, singly or in combination, would not suggest adding a tuner that is integrated by switching means which are connected to the tuner, the VCR and the projector for selecting a projection function without a jack between the projector means and either of the VCR or the tuner (brief, page 7). The examiner agrees (answer, page 2) that Lim does not specify the tuner. However, the examiner asserts (answer, page 6) that Lim in fact discloses switching means (55b) except that instead of selecting a video signal from a tuner, the switching means selects a video signal from a camera. The examiner additionally asserts (final rejection, page 5) that since all of the video parts in Lim are in one housing, there is no jack connection between the projector and either of the VCR or tuner.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. *See In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). In meeting this burden, the examiner is required to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. *See In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

To overcome the deficiency of Lim, the examiner notes (final rejection, page 2) that in the television art, using a tuner as a video source is old and well-known. The examiner relies on Dunlap, asserting (answer, page 6) that to reinforce the teachings of Lim, Dunlap is used to show that switching means to switch video signals from a tuner is old and well-known and that more alternative video signals can be enjoyed by a user in doing so. We note that claim 1 requires a tuner, VCR means, projector means and switch means connected to the tuner, VCR means and projector means for selecting a projecting function, without a jack between the projector means and either of the VCR means or the tuner. We find that Lim discloses a camcorder-projector system including a VCR (53, 54) directly recording the signals from a camera (52) and reproducing the recorded broadcast signals or other recorded signals as from a VCR tape (fig. 5 and col. 7, lines 14-21). A projector (56) directly processes and projects the signals from the camera (figure 7) or other reproduced recorded signals from the VCR. Switching means (55a) and (55b) are connected to the VCR and the projector for selecting a projection function, without a jack between the projector means and either of the VCR means or the camera. We find that Dunlap discloses a VCR system in which a VCR (12) has multiple inputs including both a TV tuner (20) for receiving signals from an antenna (fig. 2) and a camera (24); both of which connect to VCR (12) and which may be displayed on a video output monitor by a switch (col. 2, lines 41-62).

We consider Dunlap to fairly suggest to one of ordinary skill in the art the use of a tuner in a VCR. We agree with the examiner that in the television art, the use of a TV tuner was a well-known and a common input source to a VCR and that Lim is capable of displaying any video input signal (col. 16, lines 32-37). In addition, we agree with the examiner that the selection of video input signals in a VCR by a switching means is fairly taught by Dunlap. We are not persuaded by appellants' assertions that (brief, page 6) it would not have been obvious to one of ordinary skill in the art to include the switching circuit of Dunlap into Lim so that more input selections can be provided to the viewer because there would have been no motivation to augment the functions of Lim in that particular direction, and that to piggy-back the tuner of Dunlap onto the camcorder of Lim would have been beyond the farthest "imaginings" [sic: imagination] of one of ordinary skill in the art. As we stated, *supra*, Lim teaches the use of switching means (55a and 55b) for connecting the VCR (53 and 54) and camera (52) to the projector and Dunlap discloses a VCR system in which a VCR (12) has multiple inputs including both a TV tuner (20), for receiving signals from an antenna (fig. 2), and a camera (24); both of which connect to VCR (12) and which may be displayed on a video output monitor by a switch (col. 2, lines 41-62). In light of the teachings of Dunlap, one of ordinary skill in the art would have a suggestion to add a tuner and switching means to the system of Lim in order to increase the functionality of Lim's

VCR by including a tuner within the single device. While claim 1 calls for a switching means, the claim does not specify how many switches are used. With regard to appellants' assertion (brief, page 5) that Lim is an inappropriate reference because it is directed to a camcorder which includes a camera in contrast to appellants' VCR-projector which has no camera, we note that the claims do not preclude the presence of a camera. We are not persuaded by appellants' arguments (brief, page 5) that adding a TV tuner to the "portable" camcorder of Lim would make the camcorder non-portable, and furthermore that the combination would be impractical (brief, page 6) or that the combination would not be a technological advance (reply brief, page 2). We do not agree with appellants that adding a tuner to Lim would detract from the use of the camcorder in its normal operation. In addition, being able to project TV signals in situations where a TV is not available would be a benefit of Lim's system (col. 20, lines 64-67). With respect to appellants' assertion (reply brief, page 2) that the claims require a tuner that is inherently integral with the VCR-projector assembly, we agree with the examiner (answer, pages 4-5) that the claims do not require an integral tuner, and we note that Dunlap teaches the use of a VCR having an integral tuner (20). With respect to appellants' argument (reply brief, page 2) that even if a tuner pack was included in the apparatus of Lim, it would require a jack to connect the tuner with the rest of the apparatus of Lim; we note that claim 1 recites "without a jack between the projector means and either of the VCR means or the tuner." We find that Lim discloses the projector to be an integral part of the



system. Although not brought to our attention by either appellants or the examiner, Lim teaches that the display on the LCD is projected on a wall through the eyepiece by changing the amount of light supplied to the rear of the LCD panel (56j) by the light source (56g), which is controlled by light amount controller (56f) (col. 11, line 61 - col. 12, line 22). Lim does not disclose the use of a jack from the video signal processing circuitry (fig. 7) to the projector. Upon adding a tuner and switch to the VCR of Lim, the signal from the tuner would be displayed and processed through the projector in the same manner as the signals from the camera and VCR, i.e., without the use of a jack.

Appellants assert that the prior art references would not have achieved the result of avoiding manual controls. The examiner's position (final rejection, page 3) is that it would have been obvious to include the remote zoom control of Miyashita into Lim so that the operator could conveniently control the zoom function of the projector. We find that Miyashita discloses a video projection system having zoom processing means (col. 14, lines 33-38 and col. 16, lines 31-46), and we are in agreement with the examiner that to operate the zoom processing means from the key application part for the convenience of the operator would have been fairly suggested to one of ordinary skill in the art by the teachings of Miyashita.

Accordingly, it is our judgment that it would have been obvious to one of ordinary skill in the art to have provided the system of Lim with a tuner and switching means as taught by Dunlap in order to increase the functionality of Lim's VCR by including a tuner within a single device, and that it would

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have been further obvious to one of ordinary skill in the art to have made the manual zoom processing means of Lim operable by a key application part as taught by Miyashita so that a user of the projection system would be able to operate the zoom processing means more conveniently. Therefore, we will sustain the examiner's rejection of claims 1-6 under 35 U.S.C. § 103.

We note that appellants have chosen not to argue any of the other specific limitations of claim 1 as a basis for patentability. As stated by our reviewing court *In re Baxter Travenol Labs.*, 952 F.2d 388, 391, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991), "[i]t is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for nonobvious distinctions over the prior art."

37 CFR § 1.192(a)(July 1, 1996) *as amended at* 60 Fed. Reg. 14518 (March 17, 1995), which was controlling at the time of appellants filing the brief, states as follows:

The brief . . . must set forth the authorities and arguments on which the appellant will rely to maintain the appeal. Any arguments or authorities not included in the brief may be refused consideration by the Board of Patent Appeals and Interferences, unless good cause is shown.

Also, 37 CFR § 1.192(c)(8)(iv) states:

For each rejection under 35 U.S.C. 103, the argument shall specify the errors in the rejection and, if appropriate, the specific limitations in the rejected claims which are not described in the prior art relied on in the rejection, and shall explain how such limitations render the claimed subject matter unobvious over the prior art. If the

rejection is based upon a combination of references, the argument shall explain why the references, taken as a whole, do not suggest the claimed subject matter, and shall include, as may be appropriate, an explanation of why features disclosed in one reference may not properly be combined with features disclosed in another reference. A general argument that all the limitations are not described in a single reference does not satisfy the requirements of this paragraph.

Thus, 37 CFR § 1.192 provides that this Board is not under any greater burden than the court which is not under any burden to raise and/or consider such issues. Therefore, we are not required to raise and/or consider such issues.

Turning now to the rejection of claims 7-12, appellants assert (brief, page 7) that the mirror part of claim 7 allows a relatively non-critical projection direction selection and that the examiner has cited no reference with respect to the mirror part and has provided only general discussion of "compactness." The position of the examiner (final rejection, page 3) is that Lim does not disclose the mirror part, as claimed, and that conventionally mirrors are often used for reflecting lights in a projector in order to change the optical path of the light. The examiner further asserts that by using mirrors, the structure can be compacted because the light path length is reduced and that if compaction is the goal of design, it would have been obvious to one of ordinary skill in the art to include such mirrors into Lim to perform the well known functions as claimed.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Claims will be given their broadest reasonable interpretation consistent with the

specification, and limitation appearing in the specification are not to be read into the claims. *In re Etter*, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985).

Claim 7 is similar to claim 1, additionally requiring projection control means for controlling and processing of the image<sup>4</sup> “in response to a user’s selection of projection direction” and “a mirror part for reflecting images processed under the control of the projection control means onto a screen in a projection direction selected in response to a user’s projection direction selection.” We find no suggestion in Lim or in any of the other applied references, singly or in combination, to suggest that the user can select the direction of projection of the images onto a screen. Lim discloses only a single direction of projecting an image. The examiner’s unsupported statement or speculation that mirrors are often used for reflecting lights in a projector in order to change the optical path of the light and if compaction is the goal of design, it would have been obvious to one of ordinary skill in the art to include such mirrors into Lim to perform the well-known functions recited in claim 7 is insufficient to meet the examiner’s burden of producing a factual basis for the rejection.

We are not inclined to dispense with proof by evidence when the proposition at issue is not supported by a teaching in a prior art reference or shown to be common knowledge of unquestionable

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<sup>4</sup> We note that the phrase “of the projection part” in claim 7 lacks antecedent basis. However, the scope of claim 7 is understandable under 35 U.S.C. § 112 (2). We construe the language of the claim to mean that the projection control means controls the processing and projecting of the image by the projector means in response to a user’s selection of a projection direction.

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demonstration. Our reviewing court requires this evidence in order to establish a *prima facie* case. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); *In re Knapp-Monarch Co.*, 296 F.2d 230, 232, 132 USPQ 6, 8 (CCPA 1961); *In re Cofer*, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966). Our reviewing court states in *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785, 788 (Fed. Cir. 1984) the following:

The Supreme Court in *Graham v. John Deere Co.*, 383 U.S. 1 (1966), focused on the procedural and evidentiary processes in reaching a conclusion under Section 103. As adapted to ex parte procedure, Graham is interpreted as continuing to place the "burden of proof on the Patent Office which requires it to produce the factual basis for its rejection of an application under section 102 and 103." *Citing In re Warner*, 379 F.2d 1011, 1020, 154 USPQ 173, 177 (CCPA 1967).

Accordingly, we will reverse the rejection of claims 7-12 under 35 U.S.C. § 103.

### ***SUMMARY***

The rejection of claims 1-6 under 35 U.S.C. § 103 is affirmed. The rejection of claims 7-12 under 35 U.S.C. § 103 is reversed. No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

### ***AFFIRMED-IN-PART.***

MICHAEL R. FLEMING )

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Administrative Patent Judge

JOSEPH L. DIXON

Administrative Patent Judge

STUART S. LEVY

Administrative Patent Judge

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